AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing Of Claims:

1-14. (Canceled)

15. (New) An apparatus for sensing an object and for outputting ascertained object data, comprising:

at least one object-detection device;

a connector element for connection to a data bus; and

an arrangement for sending, via the connector element, a fixed, predetermined number of data packets provided for transmitting measurement data up to a maximum possible number of detected objects.

16. (New) The apparatus as recited in Claim 15, further comprising:

an arrangement for inserting current measurement data of the detected objects into the fixed, predetermined number of data packets;

an arrangement for selecting and marking a most relevant object; and

an arrangement for outputting the data packets to the data bus via the connector element.

17. (New) The apparatus as recited in Claim 16, wherein:

the measurement data of the object selected as the most relevant object are marked by one of a flag and inputting object data in a predetermined data packet.

18. (New) The apparatus as recited in Claim 15, wherein:

the apparatus is at least one of a transmitting and receiving device for radar radiation, a transmitting and receiving device for lidar radiation, and a receiving device for an image processing system.

19. (New) An apparatus, comprising:

an arrangement for transmitting data between a first device that includes at least one object-detection device and a first connector element to a data bus, and a second device that includes at least one second connector element to the data bus and a device for further processing of measurement data ascertained by the object-detection device; and

an arrangement for transmitting the measurement data via a fixed, predetermined number of data packets provided for transmitting measurement data up to a maximum possible number of detected objects.

20. (New) The apparatus as recited in Claim 15, wherein the data bus is a CAN bus.

21. (New) The apparatus as recited in Claim 15, wherein the apparatus is used in a motor vehicle in a device for adaptive cruise control along the lines of a constant-distance control and a constant-speed control.

22. (New) A method for transmitting measurement data between an object-detection device and an evaluation device, comprising:

causing the evaluation device to send at least one data packet to the object-detection device;

causing the object-detection device to insert current measurement data of a detected object into a fixed, predetermined number of data packets;

marking objects selected as the most relevant objects and entering the marked objects into the fixed, predetermined number of data packets; and

outputting the data packets to a data bus via a connector element to the data bus.

23. (New) The method as recited in Claim 22, wherein the data packets are provided for measurement data of a constant, predetermined number of detected objects.

24. (New) The method as recited in Claim 22, wherein:

the marking includes at least one of using a flag and inputting object data at a specified position of the data packet.

25. (New) The method as recited in Claim 22, wherein the object-detection device inserts information into the data packet as to whether the evaluation device already identified the particular object as relevant in a preceding data exchange cycle.

26. (New) The method as recited in Claim 22, wherein the data packets contain object identifiers.

27. (New) The method as recited in Claim 22, further comprising:

specifying at least one of a plurality of distance limits and a plurality of velocity limits, wherein:

the object-detection device only takes into account at least one of the detected objects whose distance to the object-detection device lies within the distance limits and the detected objects whose relative velocity in relation to the object-detection device lies within the velocity limits.

28. (New) The method as recited in Claim 22, wherein the data packets are designed for a constant, predetermined number of objects and provide measurement data for 8, 16, or 32 objects.